Ontario Science Centre Annual Report 1983-84

85-6260/

Grants and Donations to the Ontario Science Centre

The Ontario Science Centre would like to thank the Ontario Ministry of Citizenship and Culture for generously allocating funds to the Science Centre, as well as the following organizations and corporations who have kindly contributed gifts in kind this year.

adidas (Canada) Limited
American Standard
ASEA Incorporated
Black Clawson Kennedy Limited
Borg Warner (Canada) Limited
C.P. Air
Camco
Coin Acceptors Canada
Cooper Roller Bearings Canada Limited
Culligan of Canada Limited
Ernst-Leitz Canada Limited
Ontario Paper Company
Singer Sewing Machine Company
Skil Canada Limited
Stelco Incorporated
War Amputations of Canada
Wilson Sports Equipment Canada Limited

The Ontario Science Centre is an Agency of the Ministry of Citizenship and Culture.

Ontario Science Centre / Centre des sciences de l'Ontario

Aims and Objectives

The basic goal of the Ontario Science Centre is to promote widely among the general public an understanding of science and technology, past, present and future, by:

1. Developing systems for increasing public interest.
This includes communicating to the public a clear notion of how science, including modern medicine and technology, affects daily lives; attempting to remove the psychological barriers that often make science appear intimidating to the non-expert, making science education accessible to the public outside the formal education system.

2. Being a high-profile, well-attended tourist attraction.
This includes creating revenue (particularly foreign exchange) to contribute towards the Ontario economy. It also means creating the kind of facilities, atmosphere and image that make the Centre a pleasurable place for people to visit, particularly those not already interested in science.

3. Providing support and extension facilities for the education system.
This includes providing educational opportunities both in support of school programs and for those who may have missed the opportunity to learn about science during their school years.

4. Playing a leading role in creative science exhibit design and presentation.
By meeting this objective, the Ontario Science Centre intends to generate income and international recognition from the sale of exhibits as well as to promote local pride in the Centre and its accomplishments.

5. Being a community centre for the discussion of science issues.
In particular, this objective is meant to encourage active public involvement in the politics of science to demonstrate that there is an important role for the non-expert in science issues.

6. Serving as an industrial liaison facility.
By showing science applied in a social or economic context, the Ontario Science Centre aims to promote an understanding of the science and technology underlying many industrial concerns. The Centre also aims to provide a showcase for Ontario industry and to encourage industrial support for exhibits and general science education.

Strategic Objectives: 1983/1984

The major objectives for this operating year 1983/84 can be summarized as follows:

Attendance

Paid	1 000 000
Schools	182 000
Outreach	200 000

Exhibit Halls

800 m² of new or renewed exhibits, primarily in the **Halls of Technology**, **Life** and **Exploring Space**. Exhibit halls to be maintained at 83% operation and maximum of 12 spontaneous visitor complaints a year.

Temporary Exhibits

Exploring the Deep Frontier: The Adventure of Man in the Sea, **March School Break**, **Science Fair** and several other small shows.

Education

6000 school group visits to the Centre; operation of school for 50 grade XIII students; enriched program for 300 students; 40 professional development days for teachers, and development of 10 program guides for teachers.

Outreach

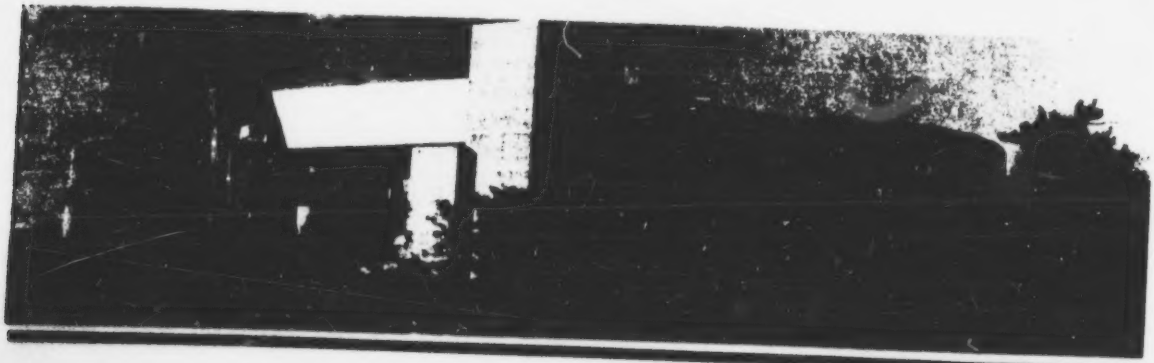
Programs to be delivered to 200 000 people in 25 communities, including special visit of **Science Circus** to Calgary Stampede and tour of New Brunswick and Prince Edward Island by the **Seeing Brain** exhibit.

Auditorium/Theatre

Continuation of programs, demonstrations, films, symposia, lectures and **Ontario Film Theatre** events.

Administration

Continue efforts to improve administrative control, support and efficiency.



Chairman's Report

The Honourable Susan Fish
Minister of Citizenship & Culture
Queen's Park
Toronto, Ontario

Dear Minister

In this report to you, first of all, I would be remiss if I did not express the appreciation of our Board for your keen interest and readiness to lend your time and counsel whenever needed. Next, I wish to pay tribute to my predecessor, Mr. Leonard M. Reilly, who served as Chairman from October 1975 to November 1983. His contributions are significant. The Board was eager to express appreciation for his leadership over the past eight years and sponsored a special function in his honour which you so kindly attended.

During my so far brief term of office I have come to know the Trustees and am impressed with the excellence of their talents and expertise. Three new members, Sandra Lyons, Gwen Van Hamme and Richard H. Wotherspoon were appointed and welcomed to the Board. They quickly became familiar with the functions of the Board and are participating effectively.

It is a pleasure to recognize that one of our Trustees, Dr. William McGowan, was appointed Director of the National Museum of Science and Technology in Ottawa, and the Board and Centre look forward to a fruitful liaison between the two institutions.

Because the Centre is one of the province's jewels of cultural achievement, it is fitting that the Centre should participate in commemorating Ontario's Bicentennial and to this end a tour of the **Science Circus** throughout Ontario as the Centre's birthday gift to Ontario was wholeheartedly endorsed by the Board. It was launched in the Centre's own Great Hall and officially opened by Trustee Claire Kates before moving on to other communities through all of Ontario.

It is felt by my Board that a greater degree of autonomy and self-reliance will make it possible for the Centre to have greater involvement with the private sector, both in terms of relationship and fundraising. For this and many other reasons the Board has endorsed for some time now the principle to change the Centre's status from Schedule I to Schedule III.

On taking up my duties as Chairman I immediately appointed a committee to provide me and my Board with information as to how the Centre would function under Schedule III, and this committee produced an extensive report recommending implementation, which the Board accepted after minor amendments and which later was presented to you for your consideration.

Soon after assuming the position as Chairman of the Board of Trustees I deemed it important that three major items should be addressed. They are International Activities, Memorandum of Understanding and Fundraising. It is my intention to establish further committees to look into the ramifications of these important issues to report to my Board and to you.

In closing I would like to say that I am delighted to be able to serve as Chairman and to collaborate with the renowned Director General, Dr. J. Tuzo Wilson, who has done so much to make the Ontario Science Centre a world-class institution.

I am pleased as well with the enthusiasm, energy and keen interest with which the members of the Board are participating and supporting the activities of the Ontario Science Centre.

Respectfully yours,

Harry Parrott

Harry C. Parrott, D.D.S.
Chairman

Director General's Report

This year the members of the staff welcomed Dr. Harry C. Parrott as Chairman. They have been encouraged by his leadership and by the proposals, referred to in his Foreward, that the manner of the Centre is to be modified. At the same time the staff applauds the remarks of appreciation which he addressed to the retiring chairman, Mr. Leonard M. Reilly. We are grateful for the ease of communication with the Board of Trustees and wise leadership which he provided for many years.

This year it seems appropriate to emphasize the important role which the Centre plays in science education in Ontario. It is important because many studies have drawn attention to the close link between the prosperity of nations and the extent to which they use scientific research and advanced technologies. These reports also point out that some other countries have passed Canada and the United States in per capita income because they have been quicker in applying innovation. All agree that better science education in schools is needed to improve production and reduce unemployment, but there is little agreement upon how to achieve this.

Fortunately, 15 years ago when the Government opened the Centre it stressed the importance of the Centre's role in science education.

The foresight of that expectation has been amply fulfilled. By the close of this financial year, teachers had chosen to bring almost three million (3 000 000) Ontario school students in classes to visit the Centre. Since there are less than one million eight hundred thousand (1 800 000) students in all the schools in Ontario, these figures provide a measure of the great impact which the Centre has had. These voluntary visits have been the more effective because most teachers book a workshop or special class in advance which is given by one of the Centre's many certified teachers with the object of enriching and reinforcing the science teaching that the schools provide.

The Centre's teachers also travel to all parts of the province giving professional development days to teachers and giving special workshops and demonstrations in schools. This is often done in conjunction with visits being paid by one of the Centre's travelling exhibitions. Coverage has been so complete that this year one of our teachers completed the Centre's visits to all of the 31 schools maintained for Cree and Ojibway pupils in the remote northern communities beyond roads and railways up to the Hudson Bay coast of Ontario.

Visits are repeated as often as possible; for example, teachers and exhibitions have visited Sault Ste. Marie no less than ten times.

It is important to realize why the Centre's teaching is so popular. Its success is a result of the experimental and hands-on approach employed.

When science is only talked about, it seems difficult and dull. Experiments and participation make it fascinating and understandable. As a result of demand the Centre has extended its educational programs and now gives courses on holiday and weekend mornings for which students or parents gladly pay. The demand is greatest for the youngest and largely pre-school children. Last year 3000 youngsters took these courses at the Centre. Half of them were three to five years old. They take their experiments very seriously and learn to like science. It is hoped to carry these methods which required no elaborate facilities all over the province as soon as teachers' manuals for instructors can be published. This is one way to popularize science.

The fame of these methods is not confined to Ontario and Canada. Many other countries are interested and this year the Centre licensed private companies to manufacture and sell more than $700 000 worth of its exhibits chiefly to Japan, China and United States. A publishing contract is currently being negotiated for a book of science activities for children to do at home.

The Centre has continued its efforts to present examples of the latest developments in science and technology. This year **Exploring Space** was reopened after a complete renovation with the addition of much new information about discoveries in space and many original participatory explanations.

In the **Hall of Engineering** and in the **Energy Gallery** many old exhibits which have served the public well were cleared away and are being replaced with examples of the latest technologies emphasizing the use of computers, robots and automated machinery in design and manufacture. Part of a full-scale house is under construction exposing sectioned utilities to explain the mysteries of the household.

As the year ends, preparations are in hand for a summer exhibition entitled "**The Artist as a Young Machine**". Besides major support from the Ministry of Citizenship and Culture, the Department of Communications and members of the business community have helped to sponsor the exhibition.

With the help of inventors and artists and with equipment drawn from across Canada and abroad the exhibition will show the furthest limits yet reached in the applications of computers to all the arts. It will be another example of the Centre's efforts to demonstrate the human aspects of science.

I cannot conclude without commenting that the success and international recognition of the Centre, which last year received scores of important delegations from abroad, had been due to two factors. The original concept of building a science laboratory open to the public was a brilliant one made at the right time. That idea has been executed by an exceptionally imaginative and highly skilled staff who, working as a team, have produced many great presentations, punctually and within budget.

J. Tuzo Wilson

J. Tuzo Wilson
Director General

Science Centre Staff

Ministry of Citizenship & Culture	189
Ministry of Government Services, Property Management Branch	30
Modern Building Cleaners	22
Metro Parks Department	7
Multi Restaurants	80
Science City	8

During 1983/84 the Science Centre's official complement dropped to 206. Two people retired and nine others left. Two civil service staff were recruited. Seventeen Science Centre staff participated in training and development programs and courses.

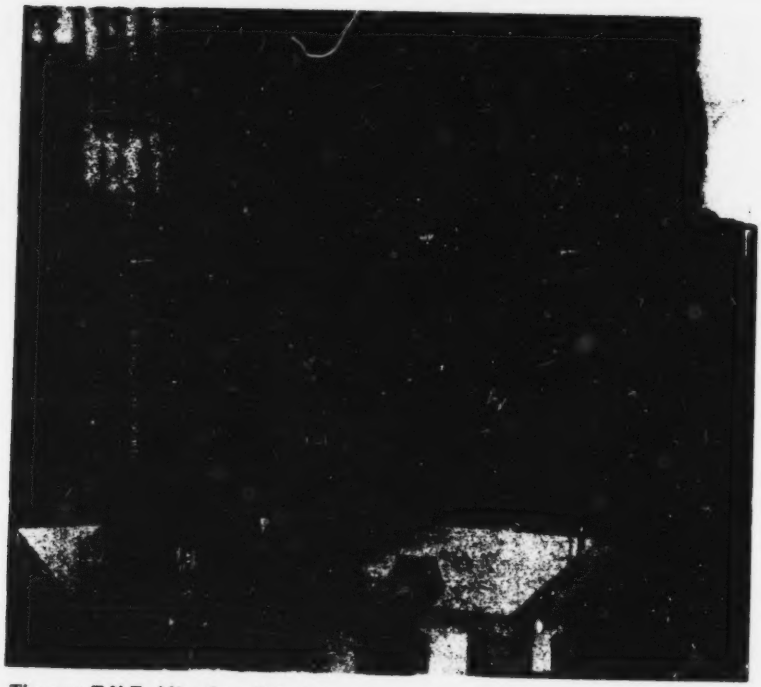
Ongoing Programs: Highlights

EXHIBIT HALLS

During 1983/84, the following new exhibits were added to halls: **Exploring Space** — Gravity Well, 3-D Galaxy/Our Galaxy, Orrery and Comparing Planets, Moon Rock, Kepler's Law, Relativity, Moon Quiz, Newton's Experiment/Decoding Star Light, Blink Comparator Planet Hunter, Galaxy Survey, Moon Month In A Minute, Moon Landing Video-Computer Game, Astronomy Area General, Astronomy Mini-Theatre, Infra Red, Parallax Viewer/Big Dipper, Radio Astronomy Theatre, Moon and You, E.M.S. Orrery, Line-up Wall Windows, Spararm and Microbot; **Communications** — six Micro-computer Exhibits; **Hall of Technology** — Automation Show; **Molecule** — Freeze Thaw Slide Show, Convection Currents; **Transportation** — TZ Motorcycle; **Canadian Resources** — Bald Eagles and Bear Wood Carving; **Outreach** — Insulation Test, Finger Painter, St. John Ambulance, Maze, Learn, TV Colourizer, Design-A-Car, Microbot, Hologram, Lunar Lander Video Game.

In addition, major modifications were carried out on the following exhibits: **Exploring Space** — Apollo Command Module, Space Docking Simulator; **Laser** — Laser; **Canadian Resources** — Lock Model; **Molecule** — Electrolysis; **Science Arcade** — Water Pumps.

The artistic side of a visitor gets a work-out at the T.N.T. Finger Painter exhibit.



The new T.N.T. Microbot elicits intense concentration from two young visitors.

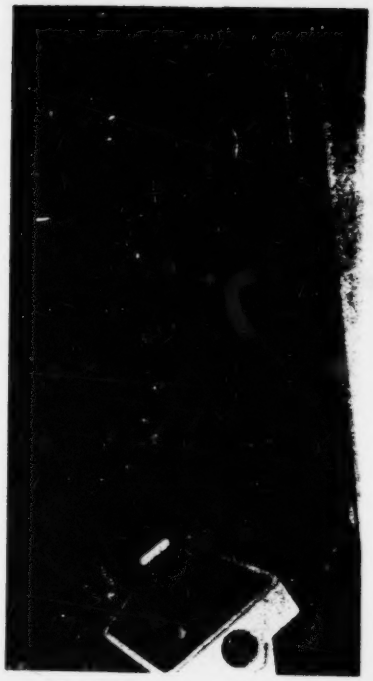
EXHIBIT SALES

International sales of Ontario Science Centre exhibits totalled $762 000, up by over $50 000 from the previous year. The majority of sales were to Japan where a long term marketing arrangement is being negotiated.

Over 20 new astronomy exhibits opened in the new **Exploring Space** hall on June 22. These permanent exhibits, conceived, designed and produced by the Centre's Design, Science, Editorial and Shop departments, provide visitors with experiences related to explorations in space and astronomy today.

Exploring Space is as up-to-date as its high-tech signs and video-disc graphics. There are lots of buttons to push and levers to move. The visitor can line up the planets for a race around the Sun, construct white light from the colours of the rainbow or land a spaceship on the Moon.

Elsewhere, the visitor can move the Moon around the Earth and create huge tidal bulges, find out why lunacy prevails during a full Moon or test Moon trivia with a push-button quiz. It is even possible to blast off at the speed of light and experience some of the bizarre effects which Einstein predicted with his famous Theory of Relativity.

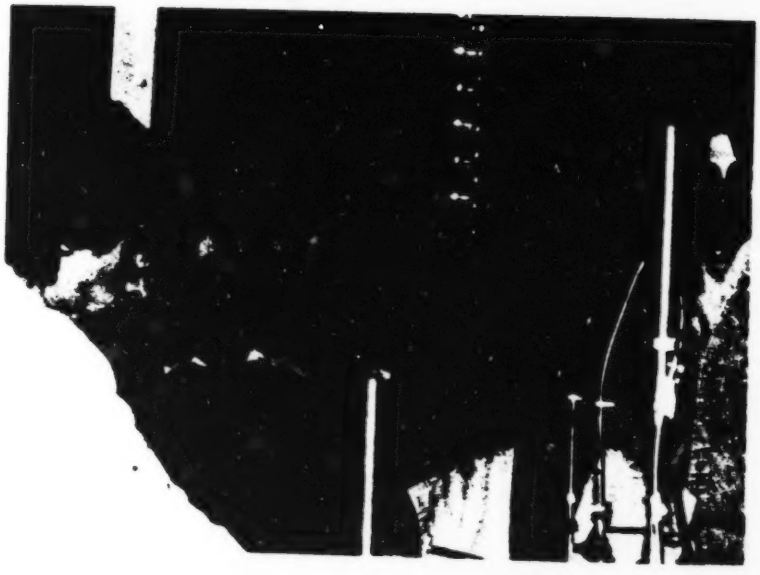


A fully-equipped planetarium theatre, **Starlab**, is at the heart of **Exploring Space**. In fact, **Starlab** opened in 1979. The need for a larger space exhibit developed from it. **Exploring Space** is the result, a way of bringing the geography of the Solar System down to Earth.

Science School

Since 1982, 25 grade 13 students have spent two semesters as full-time students in the Science Centre's pilot science school.

An evaluation of the project was prepared by the North York School Board which strongly recommended the school's continuation. The Steering Committee agreed to extend the program for three years. So far, 73 students have completed the program.



Science Road Shows

These continued to be popular. Ninety-three were done during the school year finishing June 1983.

Physics for Teachers

A two-week workshop on the use of demonstrations in teaching science was given at the Royal Military College, Kingston, at the beginning of the summer.

Teacher's Guides

The first of a new series of 20 Teacher's Guides appeared in March.

Northern Communities

The five Indian communities north of the 51st parallel not previously visited were given programs in February.

Chemistry of Food

A special program was presented to visitors during the Christmas break.

Science Enrichment

The special five-session program for students was filled to capacity through the year.

Kits

A Paper Making and Human Reproduction Kit were added to the Evolution Kit already available to schools.

Volunteers

A number of volunteers continued to look after the Greenhouse and Herb Garden.

Host Reunion

A reunion of hosts who had worked at the Centre since its opening took place in October. About 250 hosts attended.

School Booking

The school booking process was computerized.

OSCOTT

OSCOTT is the name of a series of special programs for children ages 3 to 14 on Saturdays and holidays. Most of the programs were originally started by the Ontario Science Centre staff. **OSCOTT** now run by **Friends of Science** has continued to grow with over 2500 students enrolled in over 30 different various programs.

FRIENDS OF SCIENCE

FRIENDS OF SCIENCE

Friends of Science has continued to grow throughout the year with support from the Ontario Science Centre. Membership is over 800 world wide. The third annual meeting was run jointly with the Canadian Council of Science Centres and hosted by the Ontario Science Centre, drawing members from across Canada.

NEWSCIENCE

Through the Science Centre's Editorial Department 12 issues of ***Newscience*** were published in 1983-84. ***Newscience*** is a tabloid newspaper offering an entertaining mix of feature articles about science, science news, things to do and information about Science Centre events.

Through September, ***Newscience*** was distributed monthly across Canada with *The Globe & Mail*, giving ***Newscience*** a circulation of 450,000 per issue. The Toronto Art Directors Club 1983 Awards Show gave Awards of Merit to pages from three issues of ***Newscience*** — September, October and November, 1982.

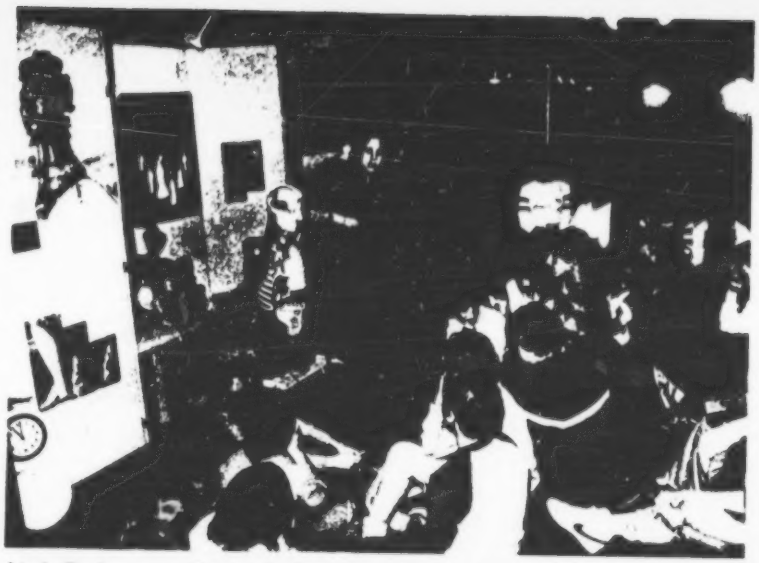
MEN OF STEEL?

T

THEY'RE CALLED THE STEEL COLLAR WORKERS. BUT TO SOME PEOPLE THEY'RE SOMETHING MORE THAN SOPHISTICATED SCREWDRIVERS TO OTHERS, THEY ARE THE STUFF OF WHICH GREAT SCIENCE FICTION FANTASY IS MADE. AND FOR YET OTHERS, THEY REPRESENT THE TERRIFYING PUSH OF TECHNOLOGY TO REPLACE THE HUMAN HAND WITH A METAL CLAW.

OUTREACH

In fiscal year 83/84 the Science Centre completed its 10th year of providing extension services to parts of Ontario outside of Metropolitan Toronto. The **Science Circus** made one high-profile trip outside of Ontario to visit the Calgary Stampede, and the national tour of the **Seeing Brain** exhibit took in Prince Edward Island and New Brunswick. A major part of the year's effort went into the planning and launching of a Bicentennial Tour of Ontario of the **Science Circus** supplemented by a dozen new exhibits, funded by BILD, called **TNT (Travelling New Technology)**. Special effort was also put into creating special exhibitions for smaller communities and events of shorter duration. These mini-circuses are now deployed under the title **Science Sideshows**.



Linda Pacheco uses George the Torso to explain the inner workings of a human.

Paul Terry lends a hand by showing a visitor how to operate the arm prosthesis in Bodyworks.

The Stetson clearly identifies the Science Circus on the road again – this time, at the Calgary Stampede.

ONTARIO FILM THEATRE AND INSTITUTE

From the left, Charles Martin Smith, Farley Mowat, and Lewis Allen on location in the Arctic wilderness to discuss filming of Mowat's book "Never Cry Wolf"

The OFT continued its successful series of international cinema with extensive programs from Algeria, Bulgaria, France and India, among others, and held the world premiere of Walt Disney's ***Never Cry Wolf***. Several film makers came to discuss their careers. The OFI's annual award for excellence in Canadian cinema went this year to the Québec film maker, Jean-Pierre Lefebvre. OFI continues to provide far-ranging information, research and archival material to the increasing number of teachers, students, researchers and historians who use its facilities in their search for knowledge in film, television and video. Last year, the OFI, in association with Associated University Presses, published its second book, ***The Figure in Film***, by Roy Clifton. The Ontario Film Archive continues to receive donations from industry and the public in the form of films, books and magazines. The distinguished film maker, Norman Jewison, has deposited much of his recent work with the Archive

Film director Norman Jewison

Financial Statement

Office of the Provincial Auditor

Financial Statements for the year ended March 31, 1984

Office of the Provincial Auditor

Parliament Buildings
Queen's Park
Toronto, Ontario
M7A 1A2

To the Board of Trustees and
to the Minister of Citizenship and Culture,

I have examined the balance sheet of The Centennial Centre of Science and Technology as at March 31, 1984, the statement of operations and retained income, and the statement of special purposes fund receipts, expenditure and fund balance for the year then ended. My examination was made in accordance with generally accepted auditing standards, and accordingly included such tests and other procedures as I considered necessary in the circumstances.

In my opinion, these financial statements present fairly the financial position of the Centre as at March 31, 1984 and the results of its operations for the year then ended in accordance with the basis of accounting described in note 1 to the financial statements, applied on a basis consistent with that of the preceding year.

A report on the audit has been made to the Board and to the Minister.

D.F. Archer

Toronto, Ontario
August 3, 1984

D.F. Archer, F.C.A.,
Provincial Auditor.

The Centennial Centre of Science and Technology

(Incorporated without share capital under the Centennial Centre of Science and Technology Act)

Balance Sheet

as at March 31, 1984

Assets	**1984**	1983
	$	$
Operating		
Cash	**3 675**	3 675
Accounts receivable – trade and other	**78 558**	96 179
Prepaid expenses	**37 520**	17 116
Inventory of general stores and small tools *[note 1c]*	**69 933**	71 621
Fixed assets, at nominal value *[notes 1d, 2 and 3]*	**1**	1
Due from Province of Ontario	**-**	92 240
	189 687	280 832
Special purposes fund		
Cash and short term deposits	**453 189**	205 859
	642 876	486 691
Liabilities, Equity and Fund Balance		
Operating liabilities		
Accounts payable and accrued liabilities *[note 1a]*	**57 908**	209 234
Due to the Province of Ontario *[note 1b]*	**61 870**	-
	119 778	209 234
Retained income	**69 909**	71 598
	189 687	280 832
Special purposes fund balance *[note 7]*	**453 189**	205 859
	642 876	486 691

See accompanying notes to financial statements.

On behalf of the Board of Trustees:

Chairman

Member

Statement of Operations and Retained Income

for the year ended March 31, 1984

	1984 $	1983 $
Income		
Fees – entrance	**1 607 449**	1 824 789
parking	**170 069**	283 746
China Show surcharge	**-**	1 947 713
Concessions	**260 613**	388 189
Other	**135 724**	127 052
	2 173 855	4 571 489
Lottario grant	**499 196**	499 712
BILD grant	**220 697**	-
Net funds provided by Province of Ontario	**6 801 418**	6 500 342
	9 695 166	11 571 543
Expenditure *[note 4]*		
Salaries and employee benefits *[note 2]*	**6 756 825**	6 671 537
Materials – new exhibits *[notes 1d and 2]*	**760 416**	660 109
maintenance of exhibits	**425 791**	438 719
Cleaning	**433 980**	438 720
Supplies and publications	**338 356**	464 706
Machinery, furniture and equipment *[notes 1d and 2]*	**172 507**	196 532
Consulting services	**161 026**	101 957
Travel	**138 103**	131 580
Advertising and promotion	**101 027**	127 392
Telephone and telegraph	**78 171**	95 463
Demonstration and instruction	**66 382**	119 041
Postage, freight and insurance	**56 467**	59 732
Equipment rentals and repairs	**41 152**	37 548
Periodicals and books	**21 226**	23 816
Film rentals and purchases	**9 090**	28 773
China Show	**-**	1 848 933
Other	**136 336**	131 519
	9 696 855	11 576 077
Deficiency of income over expenditure	**(1 689)**	(4 534)
Retained income, beginning of year	**71 598**	76 132
Retained income, end of year	**69 909**	71 598

See accompanying notes to financial statements.

Statement of Special Purposes Fund Receipts, Expenditure and Fund Balance

for the year ended March 31, 1984

	1984 $	1983 $
Receipts		
Japan circus sale *[note 5]*	700 000	-
International Science Circus capital fund *[note 6]*	100 000	-
China Book reprinting fund	62 064	50 577
Japan tour *[note 5]*	60 000	-
China exhibit sales	46 000	-
The China Science and Technology Palace Preparatory Committee Fund	33 450	472 815
Interest	31 777	9 209
Donations	17 458	1 314
ORDCO Technology Ltd royalties	14 391	32 321
Film activities	4 700	-
Share of proceeds from China Book sale	-	11 557
Bridge exhibit donors	-	6 360
Other	-	3 825
	1 069 840	587 978
Expenditure		
Exhibit construction	560 993	-
China Book reprinting	91 550	-
The China Science and Technology Palace Preparatory Committee Fund	88 067	421 822
China exhibit sales	46 000	-
Travel	21 113	-
Exhibit running costs	10 012	6 133
Share of proceeds from China Book sale	715	-
Other	4 060	2 052
	822 510	430 007
Excess of receipts over expenditure	247 330	157 971
Fund balance, beginning of year	205 859	47 888
Fund balance, end of year *[note 7]*	453 189	205 859

See accompanying notes to financial statements.

Notes to Financial Statements

March 31, 1984

1. Summary of Significant Accounting Policies

The financial statements of The Centennial Centre of Science and Technology (the Centre) present the financial position and results of activities within the framework of the accounting policies summarized below:

(a) *Expenditure*

Expenditure is reported on the accrual basis of accounting modified to allow an additional twenty-four days to pay for goods and services acquired in the fiscal year just ended. In this regard, payments to employees for the pay period which overlaps the fiscal year end date are apportioned between the two years.

(b) *Income*

Income from operations is reported on the accrual basis of accounting modified to allow an additional six days for transfers of income to the Province of Ontario pertaining to the fiscal year just ended. Special purposes fund receipts are recorded as received.

(c) *Inventory*

Inventory is valued at the lower of cost or replacement cost, determined on the first in, first out basis.

(d) *Fixed assets*

Fixed assets, other than buildings, are acquired through purchases or donations. Fixed assets purchased are charged to expenditures in the year of acquisition but the value of fixed assets donated is not included in the financial statements. Fixed assets are reported on the balance sheet at a nominal value of $1.

(e) *Special purposes fund*

The special purposes fund is maintained in accordance with the principles of fund accounting. Accordingly, resources for various purposes are classified for accounting and reporting purposes into funds that are held in accordance with the objectives specified by the donors or principals. For financial reporting purposes, the funds have been classified into two fund groupings as follows:

(i) Current restricted: funds restricted by the contributors or principals for special purpose expenditures of a current nature;

(ii) Current unrestricted: unrestricted donations and interest income earned from restricted and various unrestricted funds of a current nature.

2. Fixed Assets, Other Than Building

The total accumulated costs of fixed assets, less deletions, as at March 31 are as follows:

	1984	1983
	$	$
Exhibits (including labour, material and allocated overhead)	**10 195 649**	8 797 089
Machinery, furniture and equipment	**1 937 741**	1 745 348
Artifacts	**293 311**	296 672
	12 426 701	10 839 109

3. Fixed Assets – Building

The capital costs provided by the Ontario Government amounting to $307 800 (1983 – $532 600) in the current year are not included in the accompanying balance sheet. For information purposes only, the accumulated costs of facilities provided by the Governments of Canada and Ontario amounted to $30 645 450 (1983 – $30 337 650) as at March 31, 1984.

The land on which the Centre is located is leased for $1 per annum on a 99 year agreement commencing July 1, 1965.

4. Additional Expenditure

Certain additional operating expenses are being met on behalf of the Centre by Ontario Government ministries and are therefore not included in the statement of operations and retained income. The expenses incurred during the fiscal year, from the records of these ministries, consist of:

	1984	1983
	$	$
Building maintenance	**1 699 100**	1 572 300
Grants in lieu of municipal taxes	**56 932**	52 550
Rental of off-site facilities	**27 068**	14 908
Exchange premiums	**32 688**	7 577
	1 815 788	1 647 335

5. Japan Circus Sales and Tour

The amount of $700 000 represents the sale price of producing a Science Circus for the Kyoikusha Company Ltd. and Mitsui & Co. (Canada) Ltd. The Centre received $280 000 on signing of the sale agreement on April 23, 1983 and the balance of $420 000 on September 1, 1983 when the Science Circus was delivered.

In addition to the above agreement, on August 22, 1983, the Centre entered an agreement whereby the Science International Marketing Corporation and Kyoikusha Company Ltd. would pay the Centre $80 000 to manage a tour of the Science Circus in Japan. As of March 31, 1984, $60 000 of the tour price was received. The remaining balance of $20 000 was received on April 23, 1984 when the tour was completed.

6. International Science Circus Capital Fund

On April 29, 1983, the Centre received $100 000 from the Ministry of Industry and Trade through the Ontario Development Corporation to fund the capital construction costs of an International Science Circus. On June 26, 1984, the Province of Ontario approved funding of $959 400, with $550 000 allocated to the capital construction costs of the Circus and $409 400 allocated to fund the touring of the circus in Kuwait.

7. Special Purposes Fund

A summary of the changes in the various special purposes fund accounts for the fiscal year is as follows:

	Balance as at March 31/83 $	Add Receipts $	Deduct Expenditures $	**Balance as at March 31/84 $**
Current restricted:				
National Museums of Canada				
Seeing Brain	2 662	-	2 593	**69**
Bodyworks	171	-	171	-
Bridge Exhibit	13 360	-	-	**13 360**
The China Science and Technology Palace				
Preparatory Fund	50 993	33 450	88 067	-
China Book reprinting fund	50 022	62 064	91 550	-
Share of proceeds from China Book sale	11 557	-	715	-
Japan circus sale *[note 5]*	-	700 000	562 863	-
Japan tour *[note 5]*	-	60 000	25 091	**34 909**
International Science Circus capital fund *[note 6]*	-	100 000	-	**100 000**
Chicago Museum of Science and Industry				
China exhibit sale	-	46 000	46 000	-
Film activities	-	4 700	-	**4 700**
Transfer to current unrestricted	-	-	164 891	-
	128 765	1 006 214	981 941	**153 038**

7. Special Purposes Fund *(cont'd.)*

	Balance as at March 31/83 $	Add Receipts $	Deduct Expenditures $	**Balance as at March 31/84 $**
Current unrestricted:				
Marketing fund	-	-	4 453	
Transfer from current restricted	-	147 979	-	
	-	147 979	4 453	**143 526**
General	77 094	63 626	1 007	
Transfer from current restricted	-	16 912	-	
	77 094	80 538	1 007	**156 625**
	77 094	228 517	5 460	**300 151**
	205 859	1 234 731	987 401	**453 189**

8. Fund Transfers

During the fiscal year, the Board approved net transfers totalling $164 891 from the current restricted funds to the current unrestricted funds. These consist of:

(a) Accumulated balances of both The China Science and Technology Palace Preparatory Committee fund and China Book reprinting fund amounting to $16 912 were transferred to the general fund.

(b) Accumulated fund balances of $147 979 from the proceeds from China Book sale and Japan circus sale were transferred to the marketing fund to be applied against future operating expenses of international marketing activities.

9. Comparative Figures

Comparative figures have been reclassified where necessary to conform with the 1984 presentation.

Special Events Highlights

ALIVE AND WELL

through April 4

Produced by Health Research Ontario, this exhibition of major health research breakthroughs allowed visitors to test their tolerance to milk, peer down a stomach telescope, learn to wiggle their ears with a special feedback machine and even watch their own heart beating.

Guest speakers included

Dr. Peter Fried:
"Cigarettes, Alcohol and Marijuana during Pregnancy"

Dr. Terry Pivak:
"The Language of the Brain"

Dr. K.N. Jeejeebhoy:
"Guts and the Gutless: The Story of Bowel Function and Intravenous Feeding"

Dr. D. Garner:
"Why are Anorexia Nervosa and Bulimia More Common Now?"

NATURE PHOTOGRAPHY

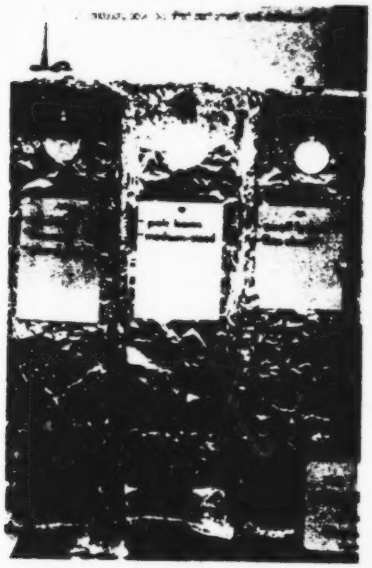
April - May

Canadian nature photographer, **Barry Ranford**, displayed his work in an exhibit called "The Wild and Free".

METRO TORONTO SCIENCE FAIR

April 6 - 11

An annual event for budding scientists from grades 7 to 13, with prizes offered in various categories including math and physical science, life sciences, applied sciences and engineering



GOING TO THE DOGS

April 10

The Dog Judges Association of Canada presented a public program on obedience training techniques, choosing a breed and general canine care for dog lovers

The **Friends of Science**, in conjunction with **CITY-TV**, presented a lively debate between professional debunker **Henry Gordon** and **Yogi Narayana**, who claimed he could predict the future. The unanimous decision, rendered by a panel of judges that included **Peter Worthington** and **Dick Smythe**, found in favour of Mr. Gordon. The Yogi did not predict the decision

TECHNION SCIENCE FAIR

April 27 - May 1

The competition among high school, college and university students was intense, the pay-off handsome: an all-expense paid summer study and travel program at the world-renowned Israel Institute of Technology

RA

May 6 - 14

The ceremony began at sunset and ended with the rising sun. For 11 unforgettable hours, the journey of **RA**, the Egyptian god of light, took over the Ontario Science Centre and its surrounding parklands. **R. Murray Schafer**'s **RA** featured Canadian contralto **Maureen Forrester**, with a legion of actors, singers, dancers, choristers and musicians

ENVIRONMENT WEEK

June 5 - 11

The NFB film "Acid Rain: Requiem or Recovery" was shown to mark the week

SOUND OF TORONTO JAZZ

Toronto's best jazz, absolutely free, was presented on selected Mondays over the winter in the main auditorium. The concerts were hosted by **Ted O'Reilly** of **CJRT-FM**, which co-sponsored the series.

CJRT•FM

EXPLORING THE DEEP FRONTIER

July 1 - January 2

This special multimedia exhibit organized by the California Academy of Sciences and the National Geographic Society, examined man's centuries-long quest to reach the ocean's bottom. The exhibit focused on the fragility of ocean life, presenting the scientific and aesthetic reasons for diving, examining the history and future of undersea exploration.

HIROSHIMA MEMORIAL FILM SERIES

August 5 - 7

If You Love This Planet", "Eleven Steps to Survival" and "Atomic Cafe" were among the films screened in this series, whose objective was the examination of the U.S. bombing of Hiroshima as an historical event and as a reference point for future concerns.

COUNCIL OF CANADIAN SCIENCE CENTRES

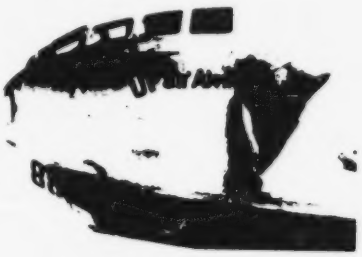
October 13 - 15

Second Annual Get-together of the Council of Candian Science Centres.

NIKON'S SMALL WORLD

July 1 - September 3

Winners of the Small World Photo Contest offered up a selection of photos that were akin to a peek through a microscope.



CANDU — IS PICKERING SAFE?

August 18

In response to the news of a breakdown of one of the atomic generators and the leakage of fuel, **Bob Popple**, Assistant Director of the Nuclear Generation Department of Ontario Hydro, gave a special lecture within days of the news reports.

DAVID OGILVY

October 31

The most sought-after man in the advertising business, **David Ogilvy**, is one of the leading communicators of the 20th century. He has made a science out of advertising with a career of successful campaigns to back him up. While on the promotion trail with his new book "Ogilvy on Advertising", he stopped by the Science Centre for a lively and informative "and then I wrote" address in the main auditorium.

CAMILLA GRYSKI

November 26

The author of "Cat's Cradle, Owl's Eyes" demonstrated string games at the **Science City** book store in the Science Centre

BILL IVY

November - December

A special exhibition of nature photography by the author of the award-winning book "A Little Wilderness: The Natural History of Toronto"

FED UP WITH CHEMISTRY

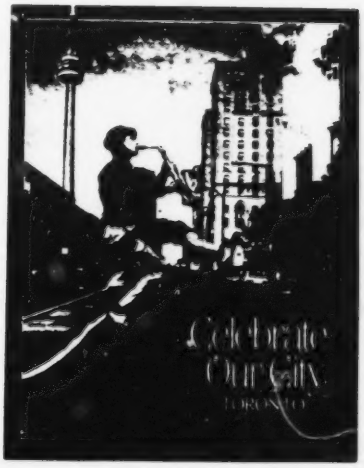
December 26 - January 2

The why and the what of cooking and food for everyone up to their eyeballs with turkey, stuffing and mincemeat pie. Presented by the Education Department of the Centre

THE MAGICAL MACHINES OF ROWLAND EMETT

Christmas

An annual event in the Great Hall, the wheezing, whirling, puffing, spinning, cranking delights of **Rowland Emett**



CELEBRATE OUR CITY

January - February

More than 200 photographs from the book "Celebrate Our City" adorned the Blue Bridge to help mark the city's Sesquicentennial. The book's publication was the culmination of a major photographic and literary competition in which Torontonians were invited to submit their views on the city

THE ARTS BUFFET, N.Y.C.
January 24

Leading New York [illegible] artists, four operators and arts critics got a chance to meet representatives from the province's major cultural institutions who were out in full force to raise their visibility south of the border. The event was co-sponsored by the Ministries of Citizenship and Culture and Tourism and Recreation. The OSC's electronic finger painter was popular with the Americans.

(Above & left) The Honourable Susan Fish, Minister of Citizenship and Culture watches a test and then tries the Colour Matching exhibit at OSC. Sue Beard looks on.

ENGINEERING WEEK
February 13 - 18

The highlight of the week was Ken Money, Canadian astronaut.

SEEING IS BELIEVING

February 20 - 26

An exciting examination of the eye and brain interaction through the use of illusions was presented by the Education Department during **Open House Free Week**

WINTER EXPOSURES FILM FESTIVAL

February 21 - 26

A film festival, organized as a special evening event during **Open House Free Week**, included a dozen international films never before released in Toronto. The highlight of the festival was a tribute to British film maker **Lindsay Anderson**, with lengthy film clips from all his films, lively reminiscences plus the complete showing of his latest film, "Britannia Hospital"

Alexander Grant, former artistic director of the National Ballet of Canada and film maker Lindsay Anderson chat following the tribute to the director of "If ...." and "O Lucky Man"

SPRING BREAK

March 10 - 18

To celebrate Ontario s Bicentennial, the Science Centre s travelling **Science Circus**, with several new exhibits added, began a major provincial tour with a first stop in the Great Hall. The Ontario Heart Foundation ran daily demonstrations by its jumpers to show that jumping rope is a good exercise for the average healthy person s heart

On September 15th, 1983, "**The Canada Science Show**" was opened in Beijing by the Honourable Susan Fish, Minister of Citizenship and Culture, and Zhou Pei-Yuan, Chairman of the Chinese Association of Science and Technology (C A S T). With the show's opening, the second half of the contract for exchange of exhibits signed between the Ontario Science Centre and the Museum of Science and Technology, a newly created unit of C A S T, was underway. While the staging of "**China: 7000 Years of Discovery**" was the responsibility of the Ontario Science Centre, the "**Canada Science Show**" was essentially the responsibility of the staff of the Museum of Science and Technology. As such, the OSC role, once the exhibits were set up, was as adviser, teacher and consultant. The exhibition consisted both of duplicates of OSC exhibits purchased out of China's profits from the China Show and Chinese-built copies of **Science Circus** exhibits.

Attracting over 75,000 visitors, the **Canada Science Show** was as successful to the Chinese as "**China: 7000 Years of Discovery**" was to Canadians. It proved beyond a doubt that C A S T had made the right decision and that a science centre as part of the modernization program was correct policy. Evidence came by way of the tremendous public and media response, along with positive feed-back from scientists, government officials and teaching institutions.

From the OSC point of view there was the satisfaction of knowing that an exhibition of participatory exhibits, films and demonstrations

(L-R) Mr. Liu Min, Charge d'Affairs to the People's Republic of China, the Honourable Susan Fish, Minister of Citizenship and Culture, Madame Liu Min and Dr. J. Tuzo Wilson at a reception at the Ontario Science Centre.

Penny Mackay and Josie Nevansink at the Canada Science Show in Beijing

Japan

On April 25, in the office of Premier William G. Davis, a contract was signed authorizing the sale of a duplicate of the Science Centre's renowned travelling exhibition, the **Science Circus**. Director General Dr. J. Tuzo Wilson of the Centre, Mr. Masao Ikeda, President of Mitsui & Co. (Canada), representing the Japanese publishing firm, Kyoikusha Co., signed the $700 000 contract. Present at the signing were Premier William G. Davis, the then Minister of Citizenship of Culture the Honourable Bruce McCaffrey, and Yuzo Hatano, Consul-General of Japan in Toronto.

While Kyoikusha, one of the top book publishers in Japan, bought the **Science Circus**, management and operation are the responsibility of SIMCO (Science International Marketing Corporation), a company set up by Kyoikusha, and Science Workshop, a Japanese design firm.

The **Science Circus** consists of over 40 participatory exhibits including workshops, films and demonstrations.

The sale marks a particularly rewarding association between the acknowledged technological excellence of Japan and the internationally respected exhibition and presentational skills of the Ontario Science Centre.

Japan Tour

On September 1, 1983, a duplicate copy of the **Science Circus** left Ontario Science Centre headed to Inuyama City near Nagoya, Japan, where it opened a two month engagement on October 4. The **Canada Science Circus** was initially staffed by Science Centre personnel while training Japanese demonstrators in the methods and techniques that have won acclaim for the Ontario Science Centre.

Not only was this the first visit of the **Science Circus** to Japan, it was also the first time the Science Centre had operated on a commercial basis.

The Japanese sponsor of the **Circus** tour, Meitetsu, arranged and financed over one million dollars worth of advertising, promotion and publicity, including television and radio spots, billboards, leaflets, posters and banners. The promotion featured the **Canada Science Circus**, the Ontario Science Centre and in a larger way, Canada itself. Examples of the media coverage included a 12-minute feature on national, prime time television and a major illustrated article in *Yomiuri*, the national evening newspaper with a six million circulation.

More than 200 000 visitors attended the **Science Circus**.

Red pennant, with Homunculus, promoting Science Circus opening in Nagoya. Translation: First time in Japan – Canada Science Circus.

Science Circus in action in Japan.

The hands-on methods of the Ontario Science Centre are as widely accepted in Japan as they are wherever the Circus appears.

Mettetsu executives and OSC representatives David Spence and Penny Mackay at the opening of the Science Circus in Iwatama City, Japan.

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Facts and Figures

Attendance

General Admission	809 470
Canadian Students	181 090
Senior Citizens	51 211
Free	34 512*
Total	1 076 283

** reflects high attendance during **Free Week Open House** in February*

Outreach	318 000

Twenty-nine communities were visited by **Outreach**

Science Circus:
Goderich, Calgary, Alberta, Sault Ste Marie, Ontario Science Centre Toronto, Launch of Bicentennial Tour

Bodyworks:
Chatham

Science Sideshows:
(formerly called Mini-Circus)
Burk's Falls, Chatham, Lakefield, Grand Bend, Gloucester, Penetanguishene, Port Colborne, Kenora, Markstay, Toronto Boatshow

Seeing Brain:
(Ontario)
London, St. Catharines, Townsend, Niagara Falls, Oshawa, Sault Ste Marie, Peterborough, Preston (Cambridge)

National Seeing Brain Tour:
(Quebec & Atlantic Provinces)
Rimouski, Quebec, Charlottetown, P.E.I., Moncton, N.B., Edmunston, N.B., Campbellton, N.B., Fredericton, N.B.

Special Assistance:
City of Toronto
Public Health
Hamilton Children Museum
TVOntario
Ontario Place
Harbourfront
OSCOTT Program

Booking & Reception

During the 1983-84 fiscal year, the auditorium was used 1187 times. Attendance was 164 373.

The three lecture theatres were used 315 times.

Facilities were rented by private functions 77 times.

The Centre was visited by 2242 tour groups for a total of 89 680 people.

American students totalling 34 480, visited in class groups.

During 1983-84, arrangements for 11 after-hours banquets were handled with an approximate attendance of 700 people at each function.

The Booking and Reception provided a central record of all pending exhibits, exhibitions, films, concerts, lectures, after hours and other Science Centre activities. The Booking office also made arrangements for rentals of Science Centre space and facilities and co-ordinated the scheduling of activities in all areas of the Centre.

Admission:

Adults $3.00
Youth $2.00
Children $1.00
Family $7.00
Parking $1.00

Hours:

10 a.m. - 6 p.m. seven days a week
Closed December 25 only

Annual Report:

Approximately 1000 copies produced for distribution to Members of the Ontario Legislature and other interested individuals and organizations.